35-08-313-15 Jan 04

FINDING OF NO SIGNIFICANT IMPACT

for

TEST CAPABILITIES REVITALIZATION AT THE AERIAL CABLE TEST FACILITY

KIRTLAND AIR FORCE BASE, NEW MEXICO

Department of Energy/Sandia National Laboratories

Pursuant to the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (40 CFR Part 1500-1508), Department of Defense (DoD) Directive 6050.1, and Air Force Instruction 32-7061, *Environmental Impact Analysis Process*, as promulgated at 32 CFR Part 989, the Department of the Air Force has prepared an Environmental Assessment (EA) (by adopting the Department of Energy (DoE) EA as described in the next paragraph) of the potential environmental impacts associated with the proposed decision of the Air Force to allow DoE to construct and renovate an Aerial Cable Test Facility located at Kirtland AFB.

In situations where non-Air Force entities (such as DoE) request an action by the Air Force, the Air Force decision must take into consideration the potential environmental impacts of the applicant's proposed activity (as described in an Air Force environmental document), insofar as the proposed action involves Air Force property or programs or requires Air Force approval. The Air Force may require the requester to prepare an EA (as was done here with the DoE), but the Air Force must independently evaluate and approve the scope and content of the EA. The Air Force has independently evaluated and approved the scope and content of the EA "Test Capabilities Revitalization for the Aerial Cable Test Facility, Sandia National Laboratories, New Mexico" (June 2003) prepared by DoE and hereby adopts the EA as an Air Force environmental document insofar as the proposed action involves Air Force property or programs or requires Air Force approval.

DESCRIPTION OF PROPOSED ACTIVITIES AND ALTERNATIVES

Proposed Action: The DoE and Sandia National Laboratories, New Mexico (SNL/NM) propose to revitalize existing test capabilities at the Aerial Cable Test Facility located in the Coyote Test Field of Kirtland Air Force Base (KAFB) in Albuquerque, New Mexico. This revitalization will consist of construction and renovation activities. The Aerial Cable Test Facility is located on land withdrawn from the U.S. Forest Service to the U.S. Air Force and permitted to DoE.

Construction and renovation activities that would be performed consist of the following:

- Drainage improvements, grading, and road upgrades
- Security enhancements and installation of a permanent power, communications, and data connectivity infrastructure

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- Test infrastructure upgrades, including repairs and replacements to pulleys, cables, winch facilities, and anchors
- Building repairs and upgrades to mechanical, electrical, and communication systems
- Replacement of three substandard sheds with structures of masonry block construction
- Construction of a rocket sled catch box
- Construction of an approximately 5,000 square foot Central Support Facility

The proposed action is one element of a larger undertaking by DoE to revitalize several of its existing test facilities located at SNL/NM. A previous environmental assessment entitled the Test Capabilities Revitalization (TCR) at SNL/NM was prepared and a Finding of No Significant Impact was signed by DoE officials on 31 Jan 03. A 30-day public review was conducted from 23 Dec 02 through 23 Jan 03. The public had no comments concerning the Aerial Cable Test Facility upgrades.

No Action Alternative: Under the No Action Alternative, current operations would continue at the facility. No new facilities would be constructed and existing facilities would not be upgraded.

SUMMARY OF ANTICIPATED ENVIRONMENTAL EFFECTS

The attached environmental assessment identifies the potential environmental effects of the proposed action. A description of the findings for each potentially affected resource area is as follows.

Air Quality

No discernible changes in air quality are anticipated as a result of the proposed action. Carbon monoxide emissions from equipment used for construction are projected to be less than one ton, which is well below the 100-tons-per-year limit requiring a conformity analysis (EA Sec. 4.1.1, p. 9).

Water Resources, Including Wetlands and Floodplains

The proposed action would not be expected to have an impact on surface or ground water resources in the vicinity of the Aerial Cable Test Facility. Relatively small quantities of water would be hauled in by truck for drinking and sanitary use. The absence of ground water contamination from the septic system associated with construction of the Central Support Facility is a function of the small amounts of effluent that would be discharged and the great depth to ground water. There would be no impacts to wetlands and floodplains (EA Sec. 4.1.2, p. 9).

Hazardous Material and Hazardous Waste

Construction related debris would consist primarily of concrete, sheet metal, wallboard, wood, and glass. Construction activities could produce about 25 tons of solid waste and construction-related debris. Friable asbestos would be removed. All waste would be appropriately

characterized, packaged, and disposed of in accordance with the existing SNL/NM waste management process (EA Sec. 4.1.3, p. 9).

Biological Resources

Any impacts to biological resources are anticipated to be minor and short term. Most proposed measures are associated with existing facilities/development and the site proposed for construction of the Central Support Facility has been previously disturbed. There are no federally listed species present and there would be no impact to state threatened species. A clearance survey would be conducted prior to initiation of construction activity to ensure that species protected by the Migratory Bird Treaty Act are not adversely affected (EA Sec. 4.1.4, p. 10).

Cultural Resources

The proposed action would have no effect, directly or indirectly, on the eight archaeological sites in the general vicinity of the test facility. DoE has identified three structures, as well as the aerial cables themselves, that are of historic interest and form a potential historic district that would be affected by the proposed action. These structures would receive Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Level II-type documentation. The property as a whole would continue to be used for the same scientific and engineering research activities it was originally designed to accommodate and for which it is historically intended. Therefore, the planned changes to the property would have a beneficial effect, as they would allow the Aerial Cable Test Facility to continue in its historic role.

Coordination with the New Mexico State Historic Preservation Office (SHPO) is continuing and the proposed action will reflect this coordination (EA Sec. 4.1.5, p. 10).

Geology and Soils

There would be no impact to geology and soils anticipated from the proposed action. Construction activities would take place in previously disturbed areas (EA Sec. 4.1.6, p. 11).

Sound

Construction activities associated with proposed renovation and upgrades would increase the sound levels in the general area during the planned 11-month construction period. This increase is expected to be small. Sound levels would return to per-construction levels following construction (EA Sec. 4.1.7, p. 11).

Socioeconomics

No substantial short- or long-term increases in employment or substantial increases in funding would result from the proposed action (EA Sec. 4.1.8, p. 11).

Environmental Justice

There is little potential for the proposed action to have a disproportionate high and adverse human health or environmental effect on low-income and minority populations. The area in which the proposed action would take place is well within the boundaries of KAFB (EA Sec. 4.1.8.1, p. 11).

Installation Restoration Program and Environmental Restoration Project Sites

There would not be any impacts to Installation Restoration Program or Environmental Restoration Project Sites as a consequence of the proposed action (EA Sec. 4.1.9, p. 11).

Cumulative Effects

The effects of the proposed action, when combined with the effects resulting from common issues of actions taken by DoE, DoD, and federal, state, and local entities, would not result in cumulatively significant effects (EA Sec. 4.3, p. 13).

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the facts and the environmental analysis contained in the attached EA and as summarized above, I find the proposed decision of the Air Force to allow DoE to revitalize existing test capabilities at the Aerial Cable Test Facility would not have a significant impact on the quality of the human environment or environmental resources. Much of the proposed action consists of upgrades to existing facilities and would involve previously disturbed areas. Affected structures and features of historic interest would be documented in accordance with HABS/HAER Level II-type documentation. There are no threatened or endangered species issues. The property as a whole would continue to be used for the same scientific and engineering research activities for which it was originally designed and for which it is scientifically intended. Therefore, the proposed action would enable the Aerial Cable Test Facility to continue in its historic role. Coordination with the New Mexico SHPO is continuing and the proposed action will reflect this coordination. Therefore, an environmental impact statement is not required and will not be prepared by the Air Force.

This analysis fulfills the requirements of the National Environmental Policy Act; the President's Council on Environmental Quality regulations; Department of Defense Directive 6050.1; 32 CFR 989, Environmental Impact Analysis Process; and Air Force Instruction 32-7061.

Date 15 Jan 04

RICHARD V. REYNOLDS
Lieutenant General, USAF
Vice Commander, AFMC

ENVIRONMENTAL ASSESSMENT

for

Test Capabilities Revitalization at the Aerial Cable Test Facility Sandia National Laboratories, New Mexico

Department of Energy, National Nuclear Security Administration
Sandia Site Office
June 2003

ENVIRONMENTAL ASSESSMENT

Test Capabilities at the Aerial Cable Test Facility

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ENVIRONMENTAL ASSESSMENT

Test Capabilities Revitalization at the Aerial Cable Test Facility

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ENVIRONMENTAL ASSESSMENT

Test Capabilities Revitalization at the Aerial Cable Test Facility
Sandia National Laboratories, New Mexico

1.0 PURPOSE AND NEED FOR THE ACTION

The purpose for the action is to support a primary U.S. Department of Energy (DOE) mission of maintaining and demonstrating the safety, reliability, and performance of the nation's nuclear weapons systems. The National Nuclear Security Administration (NNSA) performs this mission through its Stockpile Stewardship and Management Program. Existing test equipment lags significantly behind state-of-the-art capabilities and is inadequate to provide realistic testing environments for validating modeling and simulation requirements. Facilities have reached the end of their useful lives and do not meet modern health, safety, environmental, and energy conservation standards. There is a need to upgrade and replace existing test capabilities to support current and future mission requirements.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 The Proposed Action

DOE, NNSA, and Sandia National Laboratories/New Mexico (SNL/NM) propose to revitalize test capabilities at the Aerial Cable Test Facility, located in the Coyote Test Field of Kirtland Air Force Base (KAFB) in Albuquerque, New Mexico (see Appendix A for location maps). The Aerial Cable Test Facility is located on land withdrawn from the U.S. Forest Service (USFS) to the U.S. Air Force (USAF) and permitted to DOE.

The Aerial Cable Test Facility performs gravity drop and accelerated pull-down tests in support of bomb qualification tests and weapons development activities. This test capability provides controlled simulations of the worst-case impact environments experienced by weapons systems and shipping containers. Gravity drop tests are performed from a cable suspended between two peaks, giving up to a 600-foot (ft) vertical distance for acceleration. A rocket-assisted (320-ft-long sled track) pull-down technique is used to provide higher impact velocities when gravity tests are not adequate.

Construction and renovation activities that would be performed at the Aerial Cable Test Facility under the Proposed Action consist of the following:

- Site improvements, including drainage, grading, road upgrades, security enhancements, and installation of a permanent power, communications, and a data connectivity infrastructure.

- Test infrastructure upgrades, including repairs and replacements to pulleys, cables, winch facilities, and anchors. A rocket sled catch box would be constructed at the east end of the existing rocket sled track. The catch box would be constructed of reinforced concrete

and would measure about 36 ft long, 17 ft wide, and 12 ft high. The catch box would replace an existing mound of dirt and steel grating that serve to stop the high-velocity rocket sleds.

- Construction of an approximately 5,000-square-foot support facility (the Aerial Cable Test Site Central Support Facility) to provide physically secure storage, data acquisition and control, and work space for personnel assigned to the test site. This new facility would be constructed near the intersection of the Aerial Cable Test Facility road with Coyote Springs Road, immediately northwest of Building 9831 (Control Bunker). Water for the facility would be supplied via transport. A septic tank and leach field would be constructed west of the building.

- Renovation of multiple structures, e.g., building repairs and upgrades to mechanical, electrical, and communication systems, to extend their useful life 25 years and the replacement of three substandard sheds with structures of masonry block construction.

The estimated construction period is eleven months.

SNL/NM would adhere to all regulatory requirements for the proposed new construction and continued operations of the Aerial Cable Test Facility.

2.2 Alternatives to the Proposed Action

2.2.1 No Action Alternative

Under the No Action Alternative, current operations would continue at the facility. No new facilities would be constructed, and existing facilities would not be upgraded. Operations would continue as analyzed in the Expanded Operations Alternative of the SNL/NM Site-Wide Environmental Impact Statement (SWEIS), Section II - Anticipated Environmental Impacts (DOE/EIS-0281) (DOE 1999).

2.2.2 Alternatives Considered but Eliminated

Conducting Activities at Another DOE Facility – No DOE facilities currently exist that could provide the capabilities to conduct the required test activities. Therefore, this alternative would not meet the purpose and need for agency action and was not evaluated in detail.

Outsourcing Activities – No facilities owned by private-sector firms or other government agencies with the necessary capabilities currently exist. Therefore, this alternative would not meet the purpose and need for agency action and was not evaluated in detail.

Discontinue Activities – Discontinuation of the site would eliminate the ability of DOE to conduct critical testing. Therefore, this alternative would not meet the purpose and need for agency action and was not evaluated in detail.

2.3 Comparison of Alternatives

Due to the unique capabilities that exist at the Aerial Cable Test Facility, other alternatives to the Proposed Action would not be suitable at this time. By granting the Proposed Action, DOE/NNSA would realize significant cost savings to the continued effort of Stockpile Stewardship activities.

2.4 Decision to be Made

The decision to be made is whether the Proposed Action warrants further environmental evaluation or a determination of a Finding of No Significant Impact (FONSI) to the environment.

2.5 Related Environmental Impact Statements (EISs) and Environmental Assessments (EAs)

This proposal is directly related to the actions described in the Test Capabilities Revitalization Environmental Assessment (DOE/EA-1446) and capabilities described in the Expanded Operations Alternative of the SNL/NM SWEIS (DOE/EIS-0281) (DOE 1999, 2003).

3.0 AFFECTED ENVIRONMENT

3.1 History

The original aerial cable, installed in 1971, was a 1 3/8-inch wire rope spanning a 5,000-ft-wide canyon. A rocket sled was constructed to employ a rocket pull-down technique that could achieve impact velocities up to 800 ft per second as part of the initial installation. A second cable was installed in 1974 to accommodate a substantial increase in captive-flight testing. A second arena was installed approximately 500 ft north of the original test arena. This second arena is used for testing anti-tank submunitions.

3.1.1 Current Mission

The Aerial Cable Test Facility Complex is an SNL test facility for precision testing of full-scale, air-deliverable weapon systems to realistic target engagement scenarios for verification of design integrity and performance. It is also used by SNL/NM Energy Programs for transportation package certification and for verification of designs in transportation technology. The Aerial Cable Facility Complex is the only known facility capable of demonstrating compliance with impact-related container test provisions of CFR Title10, *Energy,* Part 71, "Packaging and Transportation of Radioactive Material."

The Aerial Cable Test Facility Complex is needed to support research and development activities for federal agencies on an as-available basis for:

- Precision testing of airborne sensors and sensor-fuzed weapons systems suspended in a stable platform above the ground targets.

- Precision testing of ground-based sensors and target acquisition devices directed against captive flight of simulated aircraft and aircraft targets traversing the facility cableways.

3.2 Air Quality

Ambient air quality is regulated by the joint Albuquerque-Bernalillo County-Air Quality Control Board (ABC/AQCB). The ABC/AQCB also monitors compliance with federal, state, and local air quality regulations. The New Mexico Administrative Code, Title 20, Part 11.04 (20 NMAC 11.04), entitled "General Conformity," implements Section 176 (c) of the *Clean Air Act*, as amended (42 U.S.C. 7401 et seq.), and regulations under 40 CFR 51, Subpart W, with respect to conformity of general federal actions in Bernalillo County. Bernalillo County has been designated as a maintenance area for carbon monoxide (CO) under the National Ambient Air Quality Standards (NAAQSs) and is in attainment for other federally-regulated pollutants. Code 20 NMAC 11.04.11.1.2, paragraph B, establishes the emission threshold of 100 tons per year for CO.

3.3 Water Resources

No surface-water resources exist at or near the Aerial Cable Test Facility Complex. The direction of groundwater flow in the area is approximately northwest. Depth to groundwater under the complex is about 1,300 ft.

3.4 Hazardous Materials and Hazardous Waste

Current operations at the Aerial Cable Test Facility Complex do include the use of hazardous material and have the potential to generate hazardous waste. All current waste management operations are being implemented following SNL/NM policies established to ensure worker and public safety and compliant management of regulated waste in accordance with applicable federal and state regulations, permits obtained under these regulations, and DOE Orders. These policies clearly define waste acceptance criteria, limit the number of workers who handle waste, provide appropriate waste-specific training, and centralize waste-handling areas.

3.5 Biological Resources

The plant community of the Aerial Cable Test Facility is characterized by pinyon/juniper woodland. Associated understory species include blue grama grass, mountain mahogany, Gambel oak, and wavy-leaf oak.

The most sensitive wildlife habitat at KAFB is found in the wetlands, canyons, and sites located in or adjacent to floodplains with either permanent or intermittent surface-water sources. These locations exhibit greater plant and animal diversity (IT Corporation 1995: *Sensitive Species Survey Results, Environmental Restoration Project, Sandia National Laboratories, New Mexico*).

No federally listed, proposed, or candidate species occur on KAFB or the Withdrawn Area. There is no designated critical habitat. The site hosts, or has the potential to host, the following sensitive species:

Species	Status
Bell's vireo (*Vireo bellii*)	State of New Mexico threatened species, U.S. Forest Service (USFS) sensitive species
Gray vireo (*Vireo vicinor*)	State of New Mexico threatened species, USFS sensitive species
Botta's pocket gopher (*Thomomys bottae*)	State of New Mexico sensitive species
Ringtail (*Bassariscus astutus*)	State of New Mexico sensitive species, USFS sensitive species
Western spotted skunk (*Spilogale gracilis*)	State of New Mexico sensitive species
Loggerhead shrike (*Lanius ludovicianus*) (potentially present)	U.S. Fish and Wildlife Service (USFWS) species of concern
Northern goshawk (*Accipiter gentiles*) (potentially present)	USFWS species of concern
Ferruginous hawk (*Buteo regalis*) (potentially present)	USFWS species of concern

All raptors and horned lizards are protected by the State of New Mexico and the general area of the Aerial Cable Test Facility provides habitat for a variety of species. The general area is conducive to nesting habitat for birds protected under the Migratory Bird Species Act. No sensitive, threatened, or endangered species of plants are present in the general area.

3.6 Cultural Resource

Geomorphologic and geoarchaeological studies indicate that, throughout the Kirtland Federal Complex (all facilities within KAFB boundaries), prehistoric sites could be buried beneath both alluvial and aeolian sedimentary deposits. Both the USAF and DOE have sponsored extensive archaeological surveys of properties within the boundaries of KAFB. Archaeological surveys have been performed for the Aerial Cable Test Facility, the latest in May 1992 (Steven R. Hoagland 1992: *Archaeological Evaluation of the Aerial Cable Site at SNL/NM*). The USAF is currently conducting an archaeological survey of both USAF and DOE withdrawn lands. There are eight archaeological sites present within a mile of the main test area. Three of these sites are eligible for the National Register of Historic Places (NRHP). The remainder have not had their eligibility determined.

The Cold War is the primary historic context for all SNL/NM structures built before 1990. The Cold War is recognized as a distinct and significant period of history, allowing relevant buildings to meet the requirement of "exceptional significance" for finding properties that are less than 50 years old eligible for listing in the NRHP. SNL/NM's contribution to the United States' Cold War policy were considerable in all areas of weapon design, field testing, environmental testing, weapon assembly, military liaison, and stockpile surveillance.

Although it was built in 1971, the Aerial Cable Test Facility's association with SNL/NM's Cold War environmental testing appears to meet the requirement of exceptional significance. The Aerial Cable Test Facility is currently being coordinated with the New Mexico State Historic Preservation Office. Because the Aerial Cable Test Facility is on land withdrawn from the Forest Service to the Air Force, these two agencies are also part of the consultation process. At this point in the consultation process DOE is proposing that three structures, a reinforced concrete bunker (Bldg. 9831), a concrete igloo (Bldg. 9832), and a concrete instrumentation control building (Bldg. 9834), as well as the aerial cables themselves, are of historic interest and form a potential historic district.

As part of the preparation of DOE's SWEIS consultation was accomplished with 15 Native American tribes with a cultural interest in the area to determine the presence of traditional cultural properties on KAFB as well as on the lands withdrawn from the Forest Service (DOE 1999). No specific locations were identified during these consultations, although some tribes stated that they have concerns for cultural sites in the region of influence that are important to them.

3.7 Geology and Soils

The Aerial Cable Test Facility is located within an area that is primarily filled with poorly consolidated sediments that have eroded from the surrounding mountain areas during the uplift of the Sandia, Manzanita, and Manzano Mountains, which started about 26 million years ago. The upper portion is comprised of a complex sequence of gravel, sand, silt, clay, and caliche deposits known as the Santa Fe Group and post-Santa Fe deposits. Underlying these deposits are Mesozoic and Paleozoic deposits of unknown thickness, although gravity and aeromagnetic mapping indicate that these rocks extend approximately 15,000 ft below ground level in the deepest portions of the basin. These sedimentary rocks overlie the Precambrian (590 million years and older) rocks that underlie the entire basin and that are uplifted to form the caprock of the eastern mountains (SNL 1999: *SNL/NM Environmental Information Document,* SAND99-2022/1).

Soils at the Aerial Cable Complex are heterogeneous, consisting of the poorly developed soils of the Rock Outcrop-Orthids complex, the moderately developed Salas complex, and the moderately developed Tesajo-Millet series. The Rock Outcrop-Orthid soils are formed in limestone, sandstone, and schist bedrock and are characterized by substantial variation in carbonate content. The Salas complex contains well-drained soils developed in residuum derived from schist bedrock and characterized by moderate amounts of clay and carbonate accumulation. The Tesajo-Millet soils are formed in alluvium on valley floors and low terraces. These three soil complexes differ substantially in properties that probably influence interactions between surface and vadose water (SNL 1999: *SNL/NM Environmental Information Document,* SAND99-2022/1).

3.8 Socioeconomics

KAFB is located in Bernalillo County in the Albuquerque metropolitan statistical area of central New Mexico. The region has grown by a factor of six since 1940. Large concentrations of

Hispanic and Native American populations reside to the north and south of the City of Albuquerque, including the residents of 10 Indian Reservations in the immediate region. An estimated 22 to 25 percent of all workers in the region are employed by the public sector. This estimate includes military personnel, government employees, or contract personnel (SNL 1999: *SNL/NM Environmental Information Document, Volume II,* SAND99-2022).

3.8.1 Environmental Justice

Presidential Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* requires identifying and considering, as appropriate, disproportionately high and adverse human health or environmental effects of federal programs, policies, and activities on minority and low-income populations. Approximately 51 percent of New Mexico's population is minority, and an estimated 24 percent are listed as in poverty or designated as having low income. Minority populations numbering above the state average live in areas that border KAFB to the northeast, west, and south. Areas with greater than the state average of low-income populations border KAFB to the west and south (SNL/NM, 1999: *Sandia National Laboratories, New Mexico [SNL/NM] Environmental Information Document, Volume II,* SAND99-2022).

3.9 Installation Restoration Program (IRP) and Environmental Restoration (ER) Project Sites

In 1989, the DOE created the Office of Environmental Restoration and Waste Management (ER/WM). The goal of this office is to implement the department's policy of ensuring that its past, present, and future operations do not threaten human or environmental health and safety. The current mission of the SNL/NM ER project is intended to determine the nature and extent of hazardous and radioactive contamination and to restore any sites where such materials pose a threat to human health or the environment.

In addition to the SNL/NM ER Project, KAFB has established the Installation Restoration Program (IRP). The IRP directs the planning, investigation, and cleanup of Air Force hazardous and solid waste sites at KAFB. Both the SNL/NM ER Project and KAFB IRP coordinate their activities with the New Mexico Environmental Department (NMED) and the U.S. Environmental Protection Agency Region 6.

ER Site #81, New Aerial Cable Site/Burial Site /Dump/Test Area, is the only ER site located within the area of the Proposed Action. There are no current hazards at this site related to contamination of the surface or subsurface soils. ER Site #81 was approved by the NMED for "No Further Action" on November 19, 2001.

In addition, there are no IRP sites located within or near the area of the Proposed Action.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Proposed Action

4.1.1 Air Quality

No discernible changes in air quality are anticipated as a result of the Proposed Action construction activities. CO emissions from equipment used for construction would affect air emissions under the Proposed Action. However, the total construction-related CO emissions are projected to be less than one ton, which is well below the 100-tons-per-year limit requiring a conformity analysis; therefore, a conformity analysis is not required. Water would be used for dust suppression as appropriate.

4.1.2 Water Resources

The proposed project would not be expected to have an impact on any surface or ground water resources in the vicinity of the Aerial Cable Test Facility. As stated, water for drinking and sanitary uses for the proposed Aerial Cable Test Site Central Support Facility would be brought in by transport. There would be no contamination of the aquifer from the installation of a septic tank and leach fill system associated with the construction and operation of the Central Support Facility. The absence of contamination is a function of the very small amounts of effluent that would be discharged and the great depth to ground water.

4.1.3 Hazardous Material and Hazardous Waste (includes solid waste)

Continuing operations at the Cable Site under the Proposed Action would generate non-hazardous and hazardous waste. Nonhazardous waste consists of materials such as office paper, cardboard, cleanroom attire, plastic, glass, scrap metal, packaging materials, and wood. The Cable Site currently has the ability to generate up to 9 kilograms of hazardous waste a year, which would not increase under the proposed activities.

Construction-related debris would consist primarily of concrete, sheet metal, wallboard, wood, and glass. It is anticipated that construction activities would produce approximately 25 tons of solid waste and construction-related debris under the Proposed Action.

In addition, all waste would be appropriately characterized, packaged, and disposed of in accordance with the existing SNL/NM waste management process. Existing disposal facilities can easily accommodate this waste.

4.1.4 Biological Resources

Under the Proposed Action, impacts to biological resources would be minimal and short-term. Most renovations would be accomplished in developed and previously disturbed areas and vegetation removal would be small. Construction of the Central Support Facility would displace about one and one-third acres of sparsely vegetated, low growth, and previously disturbed juniper woodland. Displacement of wildlife due to construction activities would be small. There

would be little, if any, change in area wildlife composition, population, and behavior. Noise impacts during renovation and construction would likely be equivalent to or less than normal facility operations. As stated, the estimated construction period is eleven months.

Under the Proposed Action, no impacts to any federal or State of New Mexico threatened, endangered, or candidate species are anticipated based on a preliminary project screening survey that was conducted. However, prior to construction, a clearance survey by a qualified biologist would be conducted to ensure that no impacts occur to species protected by the *Migratory Bird Treaty Act.*

4.1.5 Cultural Resources

The planned changes to the Aerial Cable Test Facility would have an impact on the structures there, i.e., planned changes would alter those characteristics of the three structures that would qualify them for inclusion in the NRHP. SNL/NM proposes to implement Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Level II-type documentation of the current state of Buildings 9831, 9832, 9834, and the aerial cables themselves. However, the property as a whole would continue to be used for the same scientific and engineering research activities it was originally designed to accommodate and for which it is historically interesting. Therefore, the planned changes to the property would allow for the continued operation of the Aerial Cable Test Facility as a historic property. Coordination with the New Mexico SHPO is continuing, and the Proposed Action will reflect this coordination.

Contract provisions and contract management would strictly confine all activities to the immediate area to preclude inadvertent "straying" of construction equipment and personnel onto areas with cultural resources. Should any cultural resource be unearthed during the proposed construction activities, all work would be halted, and the appropriate authorities within DOE, KAFB, and the USFS would be notified.

4.1.6 Geology and Soils

Construction activities would take place in previously disturbed areas. There would be no impact to geology and soils anticipated from the Proposed Action.

4.1.7 Socioeconomics

Construction of the facility would require the services of architectural, engineering, and construction firms; however, such support would be temporary. New and upgraded facilities would be staffed primarily with existing personnel. No substantial long-term increases in employment or substantial increases in funding would result from the Proposed Action or the No Action Alternative.

4.1.7.1 Environmental Justice

There is little potential for the Proposed Action to have a disproportionately high and adverse human health or environmental effect on low-income and minority populations that are located outside the boundaries of KAFB. The area of the Proposed Action is located in a remote area of

KAFB with no inhabitants within the area of potential effect. As stated, there would be no substantial economic ramifications resulting from the Proposed Action. There would also be little change in facility operations following completion of renovation and construction activities. The absence of nearby populations (including low-income and minority populations), the limited scope of the Proposed Action, and minimal effects do not present conditions for an Environmental Justice issue.

4.1.8 Installation IRP and ER Sites

There would be no impact to any ER or IRP Sites from the Proposed Action.

4.2 No Action Alternative

4.2.1 Air Quality

There would be no new or additional impact from the No Action Alternative for this resource.

4.2.2 Water Resources

There would be no new or additional impact from the No Action Alternative for this resource.

4.2.3 Hazardous Material and Hazardous Waste

There would be no new or additional impact from the No Action Alternative under this issue area.

4.2.4 Biological Resources

There would be no new or additional impact from the No Action Alternative for this resource.

4.2.5 Cultural Resources

There would be no new or additional impact from the No Action Alternative for this resource.

4.2.6 Geology and Soils

There would be no new or additional impact from the No Action Alternative for this resource.

4.2.7 Socioeconomics

There would be no new or additional impact from the No Action Alternative, socioeconomics perspective.

4.2.7.1 Environmental Justice

There would be no new or additional impact from the No Action Alternative perspective of environmental justice.

4.2.8 IRP and ER Project Sites

There would be no new or additional impacts under the No Action Alternative from activities associated with USAF IRP or SNL/NM ER sites.

4.3 Cumulative Effects

The Proposed Action entails construction and renovation activities of limited scope with a continuation of existing operations. The consequences of these actions would be negligible. Cumulative effects of SNL/NM operations, including most of those associated with the Aerial Cable Test Facility, were evaluated as part of the cumulative impact analysis in the SNL/NM SWEIS (DOE 1999). This analysis, which evaluated SNL/NM operations in the context of other DOE, U.S. Department of Defense (DOD), federal, state, and local activities, is incorporated by reference in this EA. The effects of the Proposed Action, when combined with the effects resulting from common issues of actions taken by DOE, DOD, federal, state, and local entities, would not result in cumulatively significant effects.

APPENDIX A

Maps of the Aerial Cable Test Facility

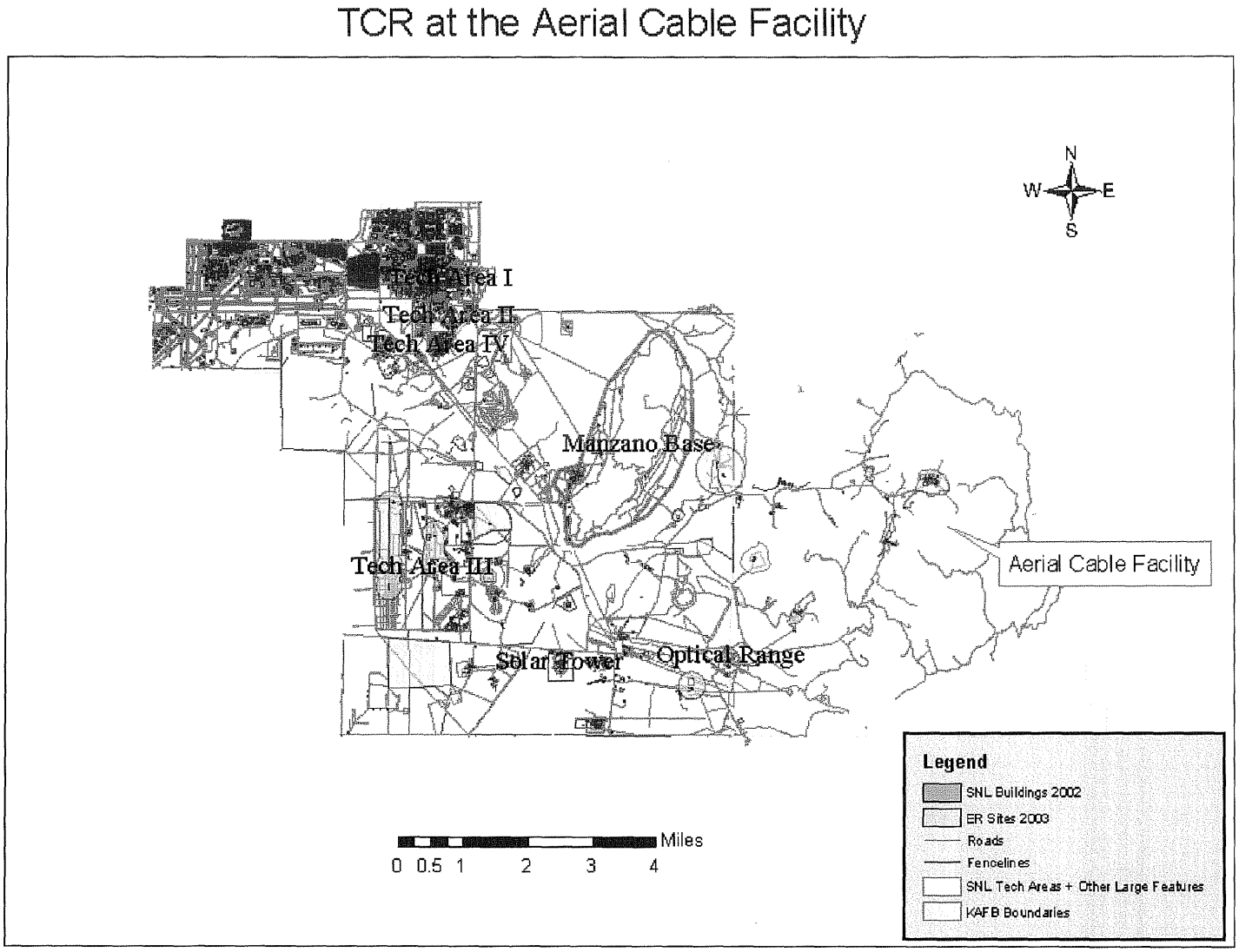

Figure A-1. Location of the Aerial Cable Facility

TCR at the Aerial Cable Facility

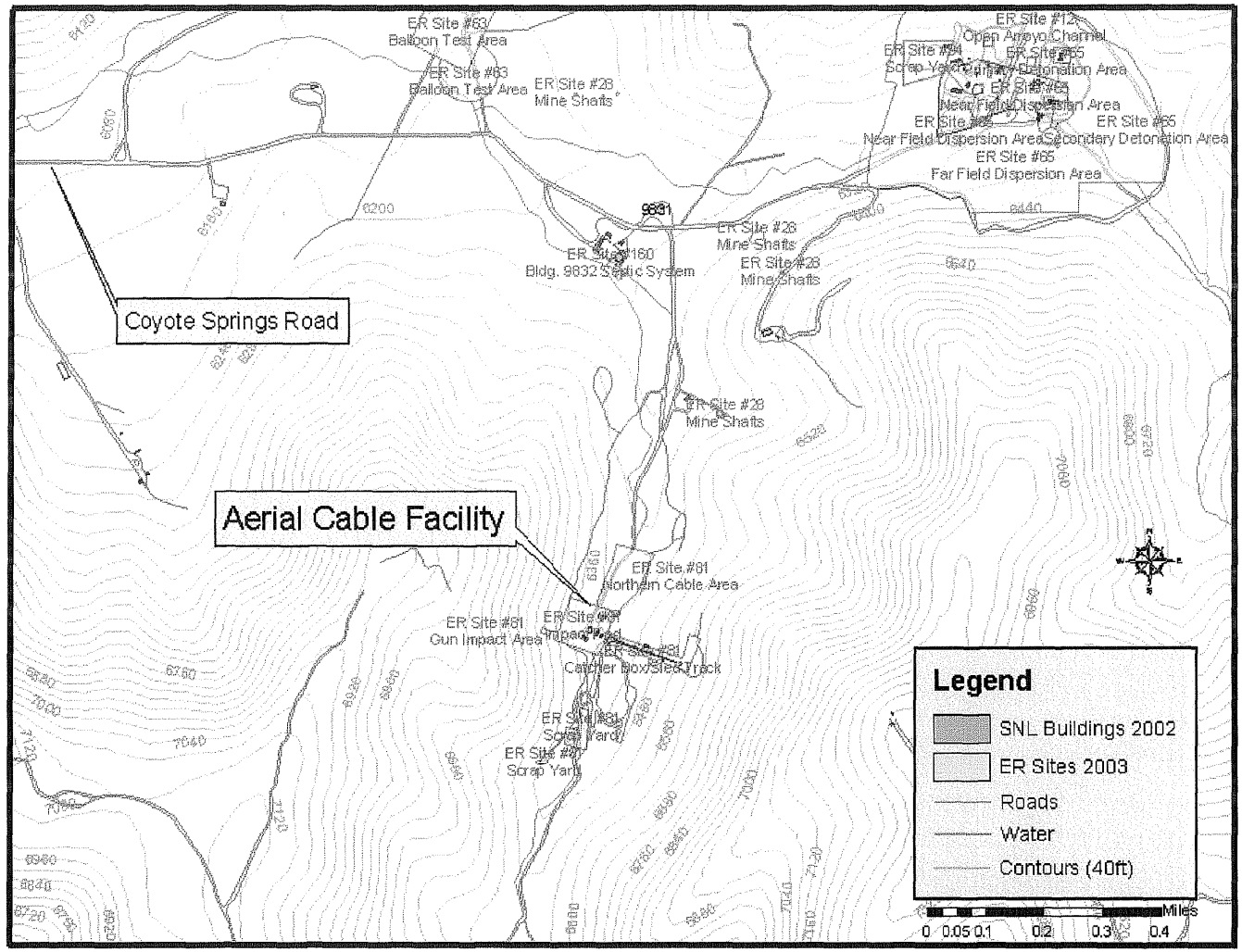

Figure A-2. Aerial Cable Facility